(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 2 June 2005 (02.06.2005)

PCT

(10) International Publication Number WO 2005/048817 A3

(51) International Patent Classification7:

A61B 18/18

(21) International Application Number:

PCT/US2004/038176

(22) International Filing Date:

15 November 2004 (15.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/520,277

13 November 2003 (13.11.2003) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:

US

60/520,277 (CON)

Filed on

13 November 2003 (13.11.2003)

- (71) Applicant (for all designated States except US): SYNER-GETICS, INC. [US/US]; 3845 Corporate Centre Drive, St. Charles, MO 63304-8694 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): SCHELLER, Gregg D. [US/US]; 17820 Suzanne Ridge Drive, Glencoe, MO 63038 (US).
- (74) Agents: ROLNICKI, Joseph M. et al.; Thompson Coburn LLP, One US Bank Plaza, St. Louis, MO 63101 (US).

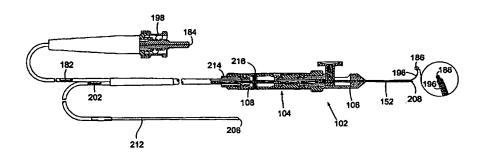
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 17 November 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ILLUMINATED LASER PROBE WITH ADJUSTBLE AREA OF ILLUMINATION



(57) Abstract: An illuminated laser probe primarily designed for ophthalmic surgery provides both illumination light to a surgical site and laser light to the surgical site. The probe has an elongate handle (12) with a tubular tip extending from a distal end (16) of the handle. A length of illumination optic fiber (82) and a length of laser optic fiber (72) extend through the handle and the tip. A mechanism (66) is provided on the handle at a position where the mechanism can easily be manipulated by a finger of a surgeon's hand holding the handle. The mechanism (66) is operatively connected with the laser optic fiber (72) and is manipulated to selectively extend a distal portion of the optic fiber from the instrument tip and retract the distal portion of the optic fiber back into the instrument tip.

| 01 150010110000

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/38176

			101,0001,0		
A. CLASSIFICATION OF SUBJECT MATTER					
IPC(7) : A61B 18/18					
US CL : 606/015					
According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED					
Minimum documentation searched (classification system followed by classification symbols)					
U.S. : 606/015					
·					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
,					
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)					
,					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category *	Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No.			Relevant to claim No.	
Y	US 5,281,214 A (Wilkins et al.) 25 January 1994 (25.01.1994), see Fig. 5 and claims 1, 9,				
-	and 12.				
Y	US 5,855,577 A (Murphy-Chutorian et al.) 5 January 1999 (05.01.1999), see the entire 1-16				
_	document				
Y	US RE 36,473 E (Esch et al.) 28 December 1999 (28.12.1999), see the entire document. 1-16			1-16	
				j	
		•			
				•	
				•	
			,		
Further	documents are listed in the continuation of Box C.	See patent	family annex.		
• s	pecial categories of cited documents:	"T" later documen	nt published after the intern	ational filing date or priority date	
The standard of the standard o		and not in con	iflict with the application b	ut cited to understand the	
	defining the general state of the art which is not considered to be of	principle or th	eary underlying the invent	ion	
particular relevance		"X" document of particular relevance; the claimed invention cannot be			
"E" carlier app	dication or patent published on or after the international filing date		wel or cannot be considered Ament is taken alone	I to involve an inventive step	
"L" document	which may throw doubts on priority claim(s) or which is cited to				
establish the publication date of another citation or other special reason (as		"Y" document of particular relevance; the claimed invention			
specified)				when the document is combined such combination being obvious	
"O" document	O" document referring to an oral disclosure, use, exhibition or other means		to a person skilled in the art		
"P" document	published prior to the international filing date but later than the	"&" document member of the same patent family			
priority dete claimed					
Date of the actual completion of the international search Date of mailing of the international search report					
Pare of the at	cear completion of the international search				
27 June 2005	(27.06.2005)	28 SEP 2005			
	niling address of the ISA/US	Authorized officer			
	Stop PCT, Attn: ISA/US	to Sheila A. Venew			
Commissioner for Patents		Ahmed M. Farah Paraleggi Specialist			
P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. (703)305-3590 Tech. Center 3700				nter 3700	
Facsimile No. (703) 305-3230					

Form PCT/ISA/210 (second sheet) (January 2004)